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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/481,853	01/14/2000	Gary L. Swoboda	TI-28936	6203

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EXAMINER

DAY, HERNG DER

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/481,853

Applicant(s)

SWOBODA, GARY L.

Examiner

Herng-der Day

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This communication is in response to Applicant's Amendment ("Amendment") to Office Action dated April 22, 2004, mailed July 22, 2004, and received by PTO July 26, 2004.

1-1. Claims 1-7 are pending.

1-2. Claims 1-7 have been examined and rejected.

### ***Drawings***

2. The drawing of FIG. 4 received by PTO on July 26, 2004, is objected to because it is inconsistent with Applicant's argument. Applicant has argued at page 8 of Applicant's Amendment, "Figure 4 has been amended to delete the arrowheads on the display lines", in order to overcome the objection to drawings. However, the amended Figure 4 still displays arrowheads related to Pins TDI and TDO.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The amendment filed July 22, 2004, is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The amended material, which is not supported by the original disclosure, is as follows:

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(1) Amended sentence at page 23, line 14, as described at page 3 of the Amendment.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

5-1. Applicant's amendments dated September 22, 2003, and February 17, 2004, to the original specification at page 18, lines 13-14, to delete the language "when the ACNTL register ASTOP and AFEN bits are true" in order to overcome the rejections under 35 U.S.C. 112, first paragraph (section 6, Office Action dated December 17, 2003, and section 7-1, Office Action dated April 22, 2004), sets a different condition for the address comparison unit 310 to generate a debug suspend request. The new condition does not appear to have support in the original disclosure.

As described in lines 12-14 of page 18, "The address comparison unit 310 generates a debug suspend request when the ACNTL register ASTOP and AFEN bits are TRUE". In other words, the original specification has set one specific "condition", i.e., "the ACNTL register ASTOP and AFEN bits are TRUE", for the address comparison unit 310 to generate a debug

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suspend request to suspend program execution. Therefore, “the ACNTL register ASTOP and AFEN bits are TRUE” is essential subject matter for generating a debug suspend request to “suspend program execution”, wherein “suspending program execution” has been recited in claim 1. Deleting essential subject matter equates adding new matter because the “condition” for generating a debug suspend request by the address comparison unit 310 has been changed without support in the original specification.

If AFEN has been defined in the co-pending applications or patents, which has been incorporated by reference in this instant application, Applicant should explicitly amend the Specification to include the related information such that one skilled in the art knows how to generate a debug suspend request without undue experimentation. Such an amendment should include remarks pointing to the text in the co-pending application or patent containing the support for the amendment.

**5-2.** Applicant’s amendment to the original specification at page 23, line 14, to delete the language “when the DCNTL register DSTOP and DFEN bits are true” in order to overcome the rejections under 35 U.S.C. 112, first paragraph (section 7-2, Office Action dated April 22, 2004), sets a different condition for the data comparison unit 320 to generate a debug suspend request. The new condition does not appear to have support in the original disclosure.

As described in line 14 of page 23, “The data comparison unit 320 generates a debug suspend request when the DCNTL register DSTOP and DFEN bits are TRUE”. In other words, the original specification has set one specific “condition”, i.e., “the DCNTL register DSTOP and DFEN bits are TRUE”, for the data comparison unit 320 to generate a debug suspend request to suspend program execution. Therefore, “the DCNTL register DSTOP and DFEN bits are

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TRUE” is essential subject matter for generating a debug suspend request to “suspend program execution”, wherein “suspending program execution” has been recited in claim 1. Deleting essential subject matter equates adding new matter because the “condition” for generating a debug suspend request by the data comparison unit 320 has been changed without support in the original specification.

If DFEN has been defined in the co-pending applications or patents, which has been incorporated by reference in this instant application, Applicant should explicitly amend the Specification to include the related information such that one skilled in the art knows how to generate a debug suspend request without undue experimentation. Such an amendment should include remarks pointing to the text in the co-pending application or patent containing the support for the amendment.

6. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

6-1. For example, as described in lines 12-14 of page 18, “The address comparison unit 310 generates a debug suspend request when the ACNTL register ASTOP and AFEN bits are TRUE”. However, the specification fails to define the AFEN bit. Accordingly, it is unclear for one skilled in the art how to generate a debug suspend request without undue experimentation.

6-2. For example, as described in lines 12-14 of page 23, “The data comparison unit 320 generates a debug suspend request when the DCNTL register DSTOP and DFEN bits are TRUE”. However, the specification fails to define the DFEN bit. Accordingly, it is unclear for one skilled in the art how to generate a debug suspend request without undue experimentation.

*Allowable Subject Matter*

7. Claims 1-7 are not taught by the prior art, and would be allowable if the above rejection under 35 U.S.C. 112, first paragraph, is overcome.

*Applicant's Arguments*

8. Applicant argues the following:

(1) "The original language taught the genus and inadequately taught the species. The amended language teaches only the genus. As a result of the deletion the Applicant can claim the genus and cannot claim the species" (page 10, paragraph 2, Amendment).

(2) "The 'new condition' noted in the OFFICE ACTION is in fact deletion of an inadequately taught limitation from the original. Because the inadequately taught limitation in the original application is a species within an adequately taught genus, the deletion is not new matter" (page 10, paragraph 2, Amendment).

(3) "The original rejection by stating that the teaching of AFEN was inadequate failed to give any meaning to this text. This effectively ruled reference to AFEN was meaningless" (page 10, last paragraph, Amendment).

(4) "Thus the application teaches at least seven modes of detecting a debug event, of which only two are ruled inadequately disclosed. The Applicants respectfully submit that the limitation of claim 1 is adequately taught in the application even if the descriptions of AFEN and DFEN are inadequate" (page 12, paragraph 1, Amendment).

(5) “the original application included adequate disclosure of at least five species of the claimed genus of detecting debug events. The Applicants respectfully submit that this teaching is proper under 35 U.S.C. 112 to support the generic claim. Some species which are included within the generic claim and not specifically claimed are inadequately taught. An adequately taught generic claim may cover species not mentioned in the application. Thus the adequately taught generic claim of this application may also cover the inadequately taught species. No exclusion of this inadequately taught species should be required because the plural species taught in the application are sufficient for the generic claim” (page 13, paragraph 4, Amendment).

#### *Response to Arguments*

9. Applicant’s arguments have been fully considered.

9-1. Applicant’s arguments (1) - (2) are not persuasive. As described in lines 12-14 of page 18, “The address comparison unit 310 generates a debug suspend request when the ACNTL register ASTOP and AFEN bits are TRUE”. In other words, the original specification has set one specific “condition”, i.e., “the ACNTL register ASTOP and AFEN bits are TRUE”, for the address comparison unit 310 to generate a debug suspend request to suspend program execution. Therefore, “the ACNTL register ASTOP and AFEN bits are TRUE” is essential subject matter for generating a debug suspend request to “suspend program execution”, wherein “suspending program execution” has been recited in claim 1. Deleting essential subject matter equates adding new matter because the “condition” for generating a debug suspend request by the address comparison unit 310 has been changed without support in the original specification.

Similar conclusion apply to the new deletion at page 23, line 14 regarding the DFEN bit.



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9-2. Applicant's argument (3) is not persuasive. The original rejection states, "For example, ..., the specification fails to define AFEN bit. Accordingly, it is unclear for one skilled in the art how to generate a debug suspend request without undue experimentation" in section 7-1 of Office Action dated April 22, 2004. The original rejection has never stated, "Reference to AFEN was meaningless".

9-3. Applicant's arguments (4) - (5) are not persuasive. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, as detailed in sections 6 to 6-2 above. In other words, because the specification fails to define the AFEN bit and DFEN bit it is unclear for one skilled in the art how to generate a debug suspend request without undue experimentation. The issue is regarding how to suspend program execution upon detection of debug event. Therefore, Applicant's argument regarding detecting debug events is not persuasive.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Herng-der Day whose telephone number is (703) 305-5269. The Examiner can normally be reached on 9:00 - 17:30.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Jean Homere can be reached on (703) 308-6647. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Herng-der Day *HD*  
October 12, 2004

  
JEAN HOMERE  
PRIMARY EXAMINER